

Summary of Changes From 2006 to 2008 Standard Specifications

DIVISION 1 – GENERAL REQUIREMENTS

Section 1-01.3 Definitions

This change addresses plantings, and clarifies when the Project Engineer may establish that the project is Substantially Complete. It is required due to confusion about how to administer contract time when the contract contains plant establishment. Additional Construction Manual guidance is being developed

Section 1-04.5 Procedure and Protest by the Contractor

This section is revised by incorporating the existing GSP into the Standard Specifications to be compatible with the requirements for Disputes Review Boards. The spec is enhanced with additional information required for the Contractor to validate their protest, and a new requirement for the owner to respond to the protest.

Section 1-04.6 Variation in Estimated Quantity

This revision enables a time extension according to Section 1-08.8 for overruns in estimated quantities that affect critical activities. The provision formerly required overran quantities of work to be performed within the original time for completion. Time impacts may occur with the first unit of overrun if the item of work is on the critical path.

Section 1-06.1 Approval of Materials Prior to Use

This specification is enhanced by adding the Aggregate Source Approval database to the materials acceptance process, and by providing the web site for the QPL. Also, the method of identifying the effective date of the referenced standards is boiled down into one easy to understand statement.

Section 1-06.2(2)D Quality Level Analysis

Revised to correct a publication error in the formula for determining the Composite Pay Factor.

Section 1-06.5 Owners Manuals and Operating Instructions

The change is made because the contract does not require these to be submitted for all work. There is one reference to providing manuals in Section 8-03.3(10) for irrigation systems, and none elsewhere.

Section 1-07.9 General

The requirements for determining a labor classes not listed in the contract provisions are revised for clarity. For State funded contracts, the Contractor shall contact Labor & Industries directly. For Fed funded contracts, the Contractor shall request the determination from the Project Engineer, and the PE must obtain the labor class from the US Secretary of Labor.

Section 1-07.9(1) General

The change adds the Dept. of Labor website where Standard Form 1444, Request for Authorization of Additional Classification and Rate, is available for the Contractor's use.

Section 1-07.10 Workers Benefits

Eliminates the requirement that the Contractor submit a “Request for Release” to the Department of Labor and Industries so that Retainage may be released. The information required in the “Request for Release” is now provided to L&I directly from the Department of Revenue.

Section 1-07.11(10)B Required Records and Retention

The requirements to submit Monthly Employment Utilization Reports (MEUR's) are deleted. WSDOT OEO External Civil Rights originally requested submittal of the Reports so that they would have information in advance of their nondiscrimination compliance audits. Because the OEO is not actually using this data during the life of the contract, they have decided that

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requiring that the Contractor maintain this data in the event of an audit is preferred over submitting it to them.

Section 1-07.15 Temporary Water Pollution/Erosion Control

Revised to correct a publication error in the first paragraph.

Section 1-07.17 Utilities and Similar Facilities

WSDOT realized that these provisions needed to be revised after the recent *Scozzolo v. City of Renton* decision caused us to take a hard look at our contract requirements. The amendment to section 1-07.17 is required because the existing provisions inaccurately reflect the Contractors obligations for delays caused by utility companies or their contractors. The existing provisions made all costs associated with utility delays the responsibility of the Contractor. This is not consistent with RCW 4.24.360 and is not how WSDOT currently behaves.

Section 1-08.1 Subcontracting

This section was revised to provide an option for reporting minority business participation using CMATS. Since then, the use of CMATS has been abandoned and all reference to CMATS has been removed from the Specifications. This section includes new subcontracting provisions required by law. RCW 39.06 requires the Contractor to verify that all first tier subcontractors meet certain responsibility criteria and to include the verification requirement in every subcontract. It also requires that all subcontractors of any tier verify that lower tier subcontractors that they hire meet those same responsibility criteria, and include the verification and responsibility criteria in all subcontracts.

Section 1-08.3 Progress Schedule

This section is completely rewritten to clearly define the information required for an acceptable schedule. Scheduling terms and practices are now referenced to an industry standard that is available through the AGC of America. Simple bar chart (Type A) schedules and Weekly Look-Ahead Schedules are incorporated into the specification. A minimum bid pay item is established for a standard (Type B) schedules. The Precedence Diagramming Method (PDM) is now required. PDM differs from Activity on Arrow (AOA) and Activity on Node (AON) methods in that PDM allows Finish to Start, Start to Finish, Finish to Finish and Start to Start relationships, while the other methods allow only Finish to Start relationships. A schedule review turnaround time of 15 days is now specified. The conditions that allow the Engineer to request a Schedule Update, and the content of the update are now clearly defined. Schedule updates that are required because of the Contractors operations are not measured for payment, but those required due to the Owners actions (delays or added work, for example) may require an equitable adjustment. All of these changes were developed by the AGC/WSDOT Administration Team. Existing Region GSP's for Look-Ahead Schedules should be deleted.

Section 1-08.3(2)A Type A Progress Schedule

The time to submit a Type A schedule is revised from the first working day to ten calendar days after execution because the first working day is too late for the Project Engineer to coordinate and allocate inspection resources. A requirement is added for the contractor to identify the critical path on all Type A schedules, because a bar chart schedule does not rely on network calculations to determine the critical path.

Section 1-08.4 Prosecution of Work

The Contractor now has until the first working day that is 21 days from the date of execution to start work on the project. This is increased from 10 days. This change was developed by the AGC/WSDOT Administration Team.

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Section 1-08.5 Time for Completion

This change redefines a non-working day to include those days that the contract specifically prohibits critical work from being performed. This provision was formerly a GSP to be inserted when traffic volumes prohibit lane closures the day before a holiday or when other contract requirements specifically prohibit critical work. However, the provision was not being incorporated correctly, and was omitted from many contracts. The omission resulted in contract time being charged when critical work is prohibited, and is not consistent with WSDOT contract administration policy or with commitments made to Industry.

Section 1-08.5 Time for Completion

Additional revisions define the time between Christmas and New Years day as nonworking days, and redefine the minimum increment of unworkable days as “½ day” instead of “partial day.”

The provision now explicitly ties unworkable days to the critical path of the approved CPM schedule, where this relationship was only discussed in the Construction Manual previously.

“Other conditions beyond the control of the Contractor” are no longer eligible for a determination of unworkable days. Excusable and compensable delays that are not weather related are evaluated under Section 1-08.8 Extensions of Time. The Contractor now has up to 21 calendar days after contract execution before working days are charged, or the date that onsite work begins. All of these changes were developed by the AGC/WSDOT Administration Team.

Section 1-08.5 Time for Completion

Form FHWA 47 is deleted from the list of required documents to be submitted to establish the completion date. For several years, State Transportation Agencies have commented to FHWA that the reports generated from the data collection efforts were of little utility and that there were statistical limitations, statistical significance, and accuracy issues with the data which were felt could result in misleading information. There was also a noted reporting burden on States and contractors. The suggestions have often been to eliminate the reporting requirements all together, and FHWA has decided to implement this suggestion. The main reasons for this decision are the strong disinterest in the data collection activities and comments provided to FHWA by their partners suggesting that they are not collecting the data extensively enough to be of utility. Note: The requirement to submit form FHWA 47 has also been deleted from the Required Contract Provisions Federal Aid Construction Contracts (FHWA 1273).

Section 1-08.8 Extensions of Time

This section is revised to include a reference to the time extensions already allowed in Section 1-09.6, to allow a time extension for an overrun of estimated quantities that affects critical work in section 1-04.6, and to allow a time extension for failure to obtain critical materials and labor due to exceptional causes. The provision also requires the Engineer to evaluate requests for a time extension within 15 calendar days.

Section 1-08.9 Liquidated Damages

This change makes reference to plantings, and clarifies when the Project Engineer may establish that the project is Substantially Complete. It is required due to confusion by some project managers about how to administer contract time when the contract contains plant establishment.

Section 1-09.2(1) General Requirements for Weighing Equipment

This change clarifies the point of delivery for weighed materials. This change is necessary because of difficulties WSDOT has experienced with weight tickets becoming disassociated with materials being hauled to temporary stockpiles prior to installation.

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Section 1-09.6 Force Account

The statement regarding current copies of the Rental Rate Blue Book being available for inspection is deleted. The change is needed because the Blue Books are not actually available at AGC offices - they were removed under threat of law suits by Primedia for license violation. Also, the Blue Books are not really available for a contractor to come into one of our Region offices and use. WSDOT holds the license, and uses the Blue Books to administer our contracts. In addition, contractors working on Local Agency projects that reference our specifications interpret this spec as allowing them access to WSDOT computers for their use.

Section 1-09.6 Force Account

The AGC/WSDOT Equipment Rental Agreement has been modified to remove the prohibition for insurance against damage (a.k.a. "damage waiver") as a reimbursable cost. Accordingly, this section is revised to clarify that force account markups for insurance mean the insurance required by Sections 1-07.10 and 1-07.18.

Section 1-09.9(1) Retainage

Revises the requirements for release of Retainage to reflect procedural changes in how Labor and Industries documents that the Contractor is current with payments of industrial insurance and medical aid premiums. There is no change to how the Project office administers the contract.

Section 1-09.11 Disputes and Claims

The procedures for Disputes Review Boards are incorporated into the Standard Specifications.

This change does not require that a Disputes Review Board be used - it only provides it as an option for dispute resolution. When a DRB is not established at contract initiation by GSP, a DRB may be formed by mutual agreement of the parties. If the parties cannot agree to resolve the disputes through a DRB, then the dispute may be elevated to a claim under Section 1-09.11(2).

Section 1-10.1(1) Materials

This section is supplemented with new materials for Tall Channelizing Devices and Temporary Signal systems.

Section 1-10.2(3) Conformance to Established Standards

This specification is revised due to a name change of the referenced publication for work zone devices, and to update the implementation schedule for crash worthiness for Category 4 devices.

Section 1-10.3(3)K Portable Temporary Traffic Control Signal

New specifications for temporary signals are added. This work has been included by special provision in past contracts.

Section 1-10.4(2) Item Bids with Lump sum for Incidentals

The measurement of Other Traffic Control Labor has been clarified by relocating the description for Patrolling and Maintaining. Temporary Signal Systems have been added to this section.

Section 1-10.5(2) Item Bid with Lump Sum for Incidentals

This section is supplemented with a new bid item for Portable Temporary Traffic Control Signal.

DIVISION 2 – EARTHWORK

Section 2-02.3(3) Removal of Pavement, Sidewalks, Curbs, and Gutters

A requirement for an additional full depth relief cut is added to eliminate damage to adjacent existing panels that are to remain in place. These revisions were developed through the PCCP Committee.

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Section 2-03.3(2) Rock Cuts

The blasting plan requirements were described under controlled blasting, implying they were only required under this circumstance. This has been rearranged to clarify that a blasting plan is required for all blasting operations, with additional requirements for controlled blasting.

Section 2-09.3(1)E Backfilling

Clarifies that foundations for noise barrier walls, luminaire poles, traffic signal standards, and roadside and overhead sign structures are part of the list of items that requires backfill be placed in 6-inch lifts and compacted to a specified level of density. The Department has experienced problems with inadequate backfilling of foundations that compromises the stability of these types of foundations.

Section 2-09.3(1)E Backfilling

This section has been changed by completely rewriting the CDF spec. The changes include the following: revises CDF strength by lowering the minimum and raising the maximum strength allowed; removes the CDF Recipe mix design. Industry is reluctant to move away from the recipe mix design, but during the recent fly ash shortage we saw that industry is capable of providing CDF mixes; clarify the testing requirements for CDF. A number of questions came up from the last CDF specification asking if the test required in the specification were for the field office to test CDF. The new specification clarifies that the test are for developing the CDF mix design; clarify that CDF will be accepted by certificate of compliance, clarify that CDF can use cementitious material of the contractors choosing; addresses the use of foaming agents as well as admixtures. The previous version of the specification was silent on any requirements for foaming agents, which are not used all the time, but have come up a couple times as an option the producers want to be able to use. This change is a product of the State Construction Office with participation of the Washington Aggregate and Concrete Association.

Section 2-09.3(3)B Excavation Using Open Pits - Extra Excavation

These changes greatly enhance the requirements for safe and stable excavations. New safety measures are specified for open temporary cuts, and new slope stability design requirements are added that include working drawings and calculations to support a design conforming to the Geotechnical Design Manual.

Section 2-09.3(3)D Shoring and Cofferdams

These changes greatly enhance the requirements for structural shoring. In addition to updating some old references, new design requirements are added including the Geotechnical Design Manual and the AASHTO LRFD Bridge Design Specifications. The provision also includes design requirements that consider the possibility of overexcavation, and greatly enhance the requirements of the structural shoring submittal.

Section 2-12 Construction Geosynthetic

Section 2-12 is revised to correct improper terminology. Geosynthetic is a broader term that includes geotextile.

DIVISION 3 – PRODUCTION FROM QUARRY AND PIT SITES AND STOCKPILING

Section 3-01.4(1) Acquisition and Development

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This change is by request of our Region Materials Engineers who to enhance our ability to request additional preliminary samples for source approval.

DIVISION 5 – SURFACE TREATMENTS AND PAVEMENT

Section 5-01.3(2)B Portland Cement Concrete

This provision is enhanced to require the Contractor to protect curing concrete from shock and vibration, and to cure concrete test cylinders using cure boxes. The change is a product of WSDOT partnership with the Washington Aggregates and Concrete Association (WACA) and is intended to address the fact that some field curing conditions do not meet our specifications or AASHTO requirements.

Section 5-01.3(4) Replace Portland Cement Concrete Panel

This revision removes ambiguous language surrounding the use of epoxy resin. The previous language implied that epoxy resin may meet the requirements for Type I or Type IV. The intent was to require Type I or Type IV depending on the application as specified in Section 9-26.

Section 5-01.3(4) Replace Portland Cement Concrete Panel

A requirement for an additional full depth relief cut is added to eliminate damage to adjacent existing panels that are to remain in place. These revisions were developed through the PCCP Committee. A requirement is added to install building paper along all existing concrete surfaces and between the bottom of the slab and treated bases prior to placing concrete. This change is made to match AASHTO requirements. The revisions were developed through the PCCP Committee.

Section 5-01.3(5) Partial Depth Spall Repair

A requirement is added to install building paper along all existing concrete surfaces and between the bottom of the slab and treated bases prior to placing concrete. This change is made to match AASHTO requirements, and was developed through the PCCP Committee.

Section 5-01.3(6) Dowel Bar Retrofit

This revision removes ambiguous language surrounding the use of epoxy resin. The previous language implied that epoxy resin may meet the requirements for Type I or Type IV. The intent was to require Type I or Type IV depending on the application as specified in Section 9-26.

Section 5-01.3(6) Dowel Bar Retrofit

This revision deletes the Contractor's option to clean the slots with a pressure washer. Our materials lab has attributed some problems with delamination and low patching material strengths to the wash water used for cleaning dowel bar slots.

Section 5-01.3(10) Pavement Smoothness

Revises the reference to measuring pavement smoothness according to Section 5-05.3(12). This provision did not clearly require that work be performed according to the reference section.

Section 5-01.5 Payment

Payment for "Replace Cement Concrete Panel" is revised to include the building paper installed along all existing concrete surfaces and between the bottom of the slab and treated bases prior to placing concrete. This change is made to match AASHTO requirements, and was developed through the PCCP Committee.

Section 5-01.5 Payment

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Removes concrete slurry containment, collection and disposal from the item for Cement Concrete Pavement Grinding, and includes it with applicable concrete grinding or saw cutting items of work.

Section 5-02 Bituminous Surface Treatments

This is a complete rewrite of Section 5-02. This revision is a product of the State Materials Lab in cooperation with Region Materials experts, Region Construction Trainers, the University of Washington, and Industry. These changes are needed because this section of the contract has not undergone a major overhaul since 1988. Even with the 1988 revisions, this section has changed very little in the past 40 years. With the increased size of the WSDOT Construction Program and a constrained budget, BST construction is on the increase. This has caused us to take a closer look at updating this section for future application. A few of the significant changes include: cutback asphalts are eliminated in favor of more environmental conscious asphalt emulsions; BST Class A, B, and C nomenclature is abandoned in favor of terms that are more universal; payment provisions are enhanced with detailed descriptions of what is included in the unit price of each item.

Section 5-04.3(1) HMA Mixing Plant

These changes are a product of the WAPA/WSDOT SuperPave Implementation Task Group. These changes revise the plant requirements to permit HMA samples to be obtained by means of a mechanical sampler or by means of platforms or devices to enable sampling without entering the hauling vehicle.

Section 5-04.3(8)A Acceptance Sampling and Testing—HMA Mixture

These changes revise the sampling of HMA to require the Contractor to obtain the samples, and are a product of the WAPA/WSDOT SuperPave Implementation Task Group.

Section 5-04.3(10)B Control

The Amendment to Section 5-04.3(10)B revises the coring location for challenged nuclear density test results. The change requires the cores to be taken in approximately the same location as the nuclear density test, instead of taking the cores at a location independent of the densometer test location as previously specified. It was noted that challenges normally resulted when there were one or two nuke readings that were in question in a compaction lot. To truly test whether the gage readings were inaccurate, the core should be taken in close proximity to the location of the nuke gage reading. Using this method will reduce the number of cores that might be needed to challenge a compaction lot.

The requirements for Cyclic Density are enhanced with the test method, and the GSP for longitudinal joint density are incorporated into the Standard Specifications.

Section 5-05.3(4)A Acceptance of Portland Cement Concrete

This provision is enhanced to require the Contractor to protect curing concrete from shock and vibration, and to cure concrete test cylinders using cure boxes. The change is a product of WSDOT partnership with the Washington Aggregates and Concrete Association (WACA) and is intended to address the fact that some field curing conditions do not meet our specifications or AASHTO requirements.

Section 5-05.3(6) Subgrade

This section is modified to add a requirement That subgrade shall be prepared and compacted a minimum of 3 feet beyond each edge of the area which is to receive concrete pavement in order to accommodate the slip-form equipment.

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Section 5-05.3(7) Placing, Spreading and Compacting Concrete

Allows the average concrete core density to be 97 percent of the mix design density, or 97 percent of the actual unit weight when tested according to AASHTO T-121. The spec previously required 97 percent of mix design only, and did not account for allowable variations in the actual batch.

Section 5-05.3(7)B Stationary Side Form Construction

This specification was updated to remove requirements for base width on metal forms, which was believed to be required when the old header board machines put weight on the forms, and since they are no longer used this requirement was removed. Also, the metal forms requirement was revised to allow other forms materials to be used as approved by the project engineer, and this will help address curves in concrete in areas such as roundabouts or other areas where other form materials will work.

Section 5-05.3(8)A Contraction Joints

A requirement is added to install building paper along all existing concrete surfaces and between the bottom of the slab and treated bases prior to placing concrete. This change is made to match AASHTO requirements, and was developed through the PCCP Committee.

Section 5-05.3(10) Tie Bars and Dowel Bars

This specification was revised to clarify that dowel bars with drilled holes are required when placing new PCCP against pre-project existing PCCP.

Section 5-05.3(10) Tie Bars and Dowel Bars

This revision removes ambiguous language surrounding the use of epoxy resin. The previous language implied that epoxy resin may meet the requirements for Type I or Type IV. The intent was to require Type I or Type IV depending on the application as specified in Section 9-26.

Section 5-05.3(12) Surface Smoothness

This revision removes ambiguous language that requires the contractor to perform the testing, and increases the time allowed for the testing to be completed. The increased time for testing is provided to accommodate nonstandard work shifts and nighttime work.

Section 5-05.3(19) Reinforced Concrete Bridge Approach Slabs

These changes move Bridge Approach Slabs out of Section 5-05 Cement Concrete Pavement and into Section 6-02 Concrete Structures. This change is made to better align the type of work, reinforced concrete, with the type of concrete work being performed. This work is considered to be more like structural concrete than concrete paving, and the work is typically not done by the PCCP contractors. This is one of several modifications made to relocate bridge approach slabs from Section 5-05 to Section 6-02.

Section 5-05.4 Measurement

Measurement of cement concrete pavement is based on core depths. The depth utilized to calculate the volume shall not exceed the plan depth plus 0.04 feet.

The revisions from 0.5 inches to "0.04 feet" is being made to keep units consistent with the plan depths.

Section 5-05.4 Measurement

Reinforced Concrete Bridge Approach Slabs are moved to Section 6-02.4. Also, the specifications were enhanced with a separate item for dowel bars, which will make it easier to deal with changes in PCCP jointing.

Section 5-05.5 Payment

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Reinforced Concrete Bridge Approach Slabs are moved to Section 6-02.5. The payment section that makes dowel bars incidental to the PCCP was deleted from the August amendment to the 2006 Standard Specifications, but is reinstated in the 2008 because it is the norm instead of the exception. Also, the payment statement for Epoxy-Coated Tie Bar with Drill Hole per each is enhanced with a note clarifying that drilling is incidental to the bid item. Also, the specifications were enhanced with a separate item for dowel bars, which will make it easier to deal with changes in PCCP jointing.

Section 5-05.5(1) Pavement Thickness

The change clarifies when additional cores may be requested by the contractor.

Section 5-05.5(1)A Thickness Deficiency of 0.05 Foot or Less

The change clarifies how the average thickness is determined.

DIVISION 6 - STRUCTURES

Section 6-02.1 Description

This provision is revised to include Bridge Approach Slabs. This is one of several modifications made to relocate bridge approach slabs from Section 5-05 to Section 6-02. This change is made to better align the type of work, reinforced concrete, with the type of concrete work being performed. This work is considered to be more like structural concrete than concrete paving, and the work is typically not done by the PCCP contractors.

Section 6-02.3(1) Classification of Structural Concrete

This Amendment creates a new class of concrete, Class 4000A for bridge Approach slab applications. This allows the other information in Section 6-02, such as air content, minimum cement content, curing, weather protection, etc., to apply to the Class 4000A concrete without repeating information. This is one of several modifications made to relocate bridge approach slabs from Section 5-05 to Section 6-02.

Section 6-02.3(2) Proportioning Materials

The provision is modified to allow substitution of fly ash with ground granulated blast furnace slag. The change is required due to regional shortages of fly ash. Because hydro electric power is abundant due to heavy rainfall and snow melt, the Chehalis coal fired power plant was shut down temporarily. This means there was no local supply of fly ash for PCC mixes.

Section 6-02.3(2)A Contractor Mix Design

The provision is modified to allow substitution of fly ash with ground granulated blast furnace slag. The change is required due to regional shortages of fly ash. Because hydro electric power is abundant due to heavy rainfall and snow melt, the Chehalis coal fired power plant was shut down temporarily. This means there was no local supply of fly ash for PCC mixes.

Section 6-02.3(2)A Contractor Mix Design

Formerly, this provision did not allow a combined gradation for the fine and coarse aggregates without using a GSP. We incorporated the combined gradation into Section 9-03.1(5), but did not clearly reference that allowance here. This Amendment clarifies that a combined gradation is permitted.

Section 6-02.3(2)A Contractor Mix Design

The change removes the aggregate correction factor from the submittal requirements. The aggregate correction factor is provided in order to compensate for air trapped in the aggregate.

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Typically, Washington aggregates have very low values for this correction factor, and the correction is so small that it is inconsequential to the end product.

Section 6-02.3(2)A Contractor Mix Design

This Amendment specifies the nominal maximum aggregate size for a new class of concrete, Class 4000A for bridge Approach slab applications. This is one of several modifications made to relocate bridge approach slabs from Section 5-05 to Section 6-02.

Section 6-02.3(4)A Qualification of Concrete Suppliers

This specification change is a clarification of our previous specification, and changes terminology in the specification to match up with the National Ready Mix Concrete Association (NRMCA) checklist. Changes include using the term, "Volumetric water batching devices (including water meters)" in place of "water meters" and changing the time verification length from 6 months to 90 days for verification of Volumetric water batching devices (including water meters). This change in verification time matches up with NRMCA requirements.

Section 6-02.3(5) Conformance to Mix Design

The revision adds tolerances for ground granulated blast furnace slag. The change is required due to regional shortages of fly ash. Because hydro electric power is abundant due to heavy rainfall and snow melt, the Chehalis coal fired power plant has shut down temporarily. This means there is no local supply of fly ash for PCC mixes.

Section 6-02.3(5)B Certification of Compliance

This revision is needed because GSP 02305B1.GB6 has been applied incorrectly. The GSP is written to be applied only to projects containing Structural concrete, but the combined aggregate gradation actually may be used on any concrete (not just structural concrete). Therefore, the text of the GSP is written into the Standard Specs and the GSP is deleted.

Section 6-02.3(5)H Sampling and Testing for Compressive Strength and Initial Curing

This provision is enhanced to require the Contractor to protect curing concrete from shock and vibration, and to cure concrete test cylinders using cure boxes. The change is a product of WSDOT partnership with the Washington Aggregates and Concrete Association (WACA) and is intended to address the fact that some field curing conditions do not meet our specifications or AASHTO requirements.

Section 6-02.3(6)A Weather and Temperature Limits to Protect Concrete

This section is revised to include the current concrete evaporation rates recommended by the American Concrete Institute (ACI).

Section 6-02.3(6)A Weather and Temperature Limits to Protect Concrete

This change clarifies exactly when Cold Weather Protection is required, and specifies the source of weather data. It also requires a continuously recording maturity meter. The remainder of the provision is unchanged, but is rearranged for clarity.

Section 6-02.3(6)D Protection Against Vibration

Modified to include pile driving equipment in Class H (High Vibration).

Section 6-02.3(6)D Protection Against Vibration

This section is revised to delete the exception for pile driving equipment in the requirements for Protection Against Vibration. Pile driving equipment was identified as Class H (High Vibration)

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in the August 2006 Amendment to this section, but the exception for pile driving equipment was overlooked.

Section 6-02.3(10) Roadway Slabs and Bridge Approach Slabs

These changes move Bridge Approach Slabs out of Section 5-05 Cement Concrete Pavement and into Section 6-02 Concrete Structures. This change is made to better align the type of work, reinforced concrete, with the type of concrete work being performed. This work is considered to be more like structural concrete than concrete paving, and the work is typically not done by the PCCP contractors. This is one of several modifications made to relocate bridge approach slabs from Section 5-05 to Section 6-02.

Section 6-02.3(11) Curing Concrete

The change deletes cast-in-place box culvert tops from the curing requirements, because WSDOT no longer constructs cast-in-place box culverts as a standard item. The industry has moved to precast box culverts to decrease construction time.

Section 6-02.3(11) Curing Concrete

The concrete curing provisions are supplemented with requirements to collect and dispose of the runoff water. This requirement was omitted from the Standard Specifications due to an editing error.

Section 6-02.3(11) Curing Concrete

Added stand alone curing requirement for 4000A concrete that requires two coats of curing compound and 10 days of wet cure. The 10 days of curing matches up with recommendation of ACI 308 Guide to Curing Concrete for Type II cement, and wet cure was chosen to ensure better curing then just covering with plastic sheeting. This is one of several modifications made to relocate bridge approach slabs from Section 5-05 to Section 6-02.

Section 6-02.3(16) Plans for Falsework and Formwork

Revised the address for the Bridge and Structures office because it has been relocated.

Section 6-02.3(16)A Nonpreapproved Falsework and Formwork Plans

Revised the address for the Bridge and Structures office because it has been relocated.

Section 6-02.3(16)B Preapproved Formwork Plans

Revised the address for the Bridge and Structures office because it has been relocated.

Section 6-02.3(17)N Removal of Falsework and Forms

This change is required to clarify curing requirements for a variety of items. It removes terms that are undefined (dense plywood) and to clarify what constitutes a side form.

Section 6-02.3(24)C Placing and Fastening

Revised the clearances for placement of reinforcing steel. These changes are required to bring our provisions up to date with current AASHTO LRFD Design Specifications.

Section 6-02.3(24)E Welding Reinforcing Steel

As of the December 4, 2006 Amendment to Section 9-07.2, steel reinforcing bars for the vast majority of bridge components are required to conform to ASTM A 706. This change also dictated a review of the current specifications for welding of steel reinforcing bars. The Bridge and Structures Office steel specialist and Materials Laboratory Fabrication and Coatings Engineer have rewritten this section.

Section 6-02.3(25) Prestressed Concrete Girders

Girder designations and other terminology is revised throughout for more consistency. The submittal of girder shape revisions under Section 6-02.3(25)A is revised for more general application. Blockout placement requirements for falsework hangers are simplified in Section 6-

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02.3(25)B. The intent of girder camber information as shown in the Plans is clarified in Section 6-02.3(25)K. Girder handling, storage, and shipping requirements in Sections 6-02.3(25)L and 6-02.3(25)M are significantly revised to be consistent with related updates to the standard girder details. The submittal of bulb tee girder equalization methods during erection is simplified.

Section 6-02.3(25) Prestressed Concrete Girders

Girder designations and other terminology is revised throughout for more consistency. The submittal of girder shape revisions under Section 6-02.3(25)A is revised for more general application. Blockout placement requirements for falsework hangers are simplified in Section 6-02.3(25)B. The intent of girder camber information as shown in the Plans is clarified in Section 6-02.3(25)K. Girder handling, storage, and shipping requirements in Sections 6-02.3(25)L and 6-02.3(25)M are significantly revised to be consistent with related updates to the standard girder details. The submittal of bulb tee girder equalization methods during erection is simplified.

Section 6-02.3(26) Shop Drawings

Revised the address for the Bridge and Structures office because it has been relocated.

Section 6-02.3(26)A Shop Drawings

This change corrects an incorrect specification reference left over from the 2002 revision of this Section.

Section 6-02.3(26)A Shop Drawings

This change corrects an incorrect specification reference left over from the 2002 revision of this Section.

Section 6-02.3(28)A Shop Drawings

The address of the Bridge and Structures Office is corrected.

Section 6-02.3(28)A Shop Drawings

The physical address of the Bridge and Structures Office changed from the former Lacey location to the new Tumwater location, and is corrected by this Amendment

Section 6-02.3(28)F Tolerances

Currently, Section 6-02.3(28)F references a 1985 edition of a Precast/Prestressed Concrete Institute manual for tolerances in fabrication of precast concrete panels. This 1985 edition has since been superseded by a 1999 edition. Rather than specify a specific year, it has been suggested to reference the "latest edition."

Section 6-02.4 Measurement

Bridge Approach Slab measurement is added. This is one of several modifications made to relocate bridge approach slabs from Section 5-05 to Section 6-02.

Section 6-02.4 Measurement

This provision is supplemented with a statement for cure boxes.

Section 6-02.5 Payment

This provision is supplemented with the LS bid item, "Cure Box".

Section 6-02.5 Payment

An item for Bridge Approach Slab is added. This is one of several modifications made to relocate bridge approach slabs from Section 5-05 to Section 6-02.

Section 6-03.3(7) Shop Plans

The physical address of the Bridge and Structures Office changed from the former Lacey location to the new Tumwater location, and is corrected by this Amendment.

Summary of Changes From 2006 to 2008 Standard Specifications

Section 6-03.3(7) Shop Plans

The address of the Bridge and Structures Office is corrected.

Section 6-03.3(14) Edge Finishing

This section is revised to better define what is acceptable for the chamfering or rounding of corners along exposed sheared or cut edges.

Section 6-03.3(15) Planing of Bearing Surfaces

This section is revised to allow a fit tolerance for base plates and sole plates.

Section 6-03.3(21)A Web Plates

This change clarifies the maximum gaps allowed during fabrication of web plates. During splicing of web plates, there should be a 1/4" gap that is often overlooked during plans preparation, and the existing language would allow for a flush installation.

Section 6-03.3(25)A Welding Inspection

Section 6-03.3(25)A is revised to include a reference to the new definition for "signal standards" under Section 9-29.6. In recent years, "signal standards", as shown in the Standard Plans and defined in the GSP's for pre-approved fabrication plans, have been expanded to include many different types of poles beyond the conventional pole and mast arm arrangement.

Section 6-03.3(28)A Method of Shop Assembly

This section is revised to allow the Engineer to approve a simplification of the progressive truss or girder assembly methods for subsequent stages after a successful stage 1 assembly.

Section 6-03.3(33) Bolted Connections

This is a minor change that updates outdated terminology. The reference to bolted connections is changed from "friction type" to "slip critical" to align with current AASHTO and AISC designations.

Section 6-05.3(11)H Pile Driving From or Near Adjacent Structures

The format of this revision is changed to clarify that the second paragraph is revised in its entirety, including the table and the formula.

Section 6-05.3(11)H Pile Driving From or Near Adjacent Structures

The 2006 Standard Specifications contained new construction requirements for protecting freshly placed concrete from excessive vibration. However, the existing 6-05.3(11)H verbiage on the same subject was still left in place. This created a possible source of confusion. Since 6-02.3(6)D is intended to control for all situations, the second paragraph of Section 6-05.3(11)H is deleted and replaced with a simple reference to Section 6-02.3(6)D.

Section 6-05.5 Payment

There has been some recent confusion on the part of some Contractors and Construction PE Offices as to how concrete and steel reinforcing bars for concrete piles are to be paid for. The revision to Section 6-05.5 provides clarifying verbiage to specify the conventional WSDOT approach, which is that the concrete and steel reinforcing bars for concrete piles are to be paid for under the "Furnishing Conc. Piling" bid item.

Section 6-07.2 Materials

This section is revised to update the outdated material specification reference and QPL reference for the abrasive blast material.

Section 6-07.3(2)A Bridge Cleaning

The current fabric opening size is specified as US sieve #70. Current environmental permit requirements specified by State and Federal resource agencies are requiring US sieve #100.

Summary of Changes From 2006 to 2008 Standard Specifications

Section 6-09.3(2) Submittals

This spec is revised to clarify the intent and coverage of the containment system, and to add submittal of paving equipment specs and details.

Section 6-09.3(3)A Concrete Overlay Mixes

Currently, the third paragraph of Section 6-09.3(3)A requires that the fly ash supplier, or microsilica supplier, make recommendations as to how water reducing and superplasticizer admixtures are used for fly ash modified concrete or microsilica modified concrete, respectively. The revision to Section 6-09.3(3)A places this responsibility on the admixture manufacturer.

Section 6-09.3(6) Further Deck Preparation

This revision clarifies the roles of the Contractor and the Engineer during the bridge deck inspection for establishing areas requiring bridge deck repair. It also clarifies the timing of the inspection when hydrodemolition is used as the deck scarification method. Lastly, the section is supplemented with a reference to Section 1-05.7, where the contractor is notified that unauthorized work will not be measured for payment.

Section 6-09.3(6)C Placing Deck Repair Concrete

The requirements for curing deck repair areas are enhanced by this revision. Cure periods for larger deck repairs are different than for small deck repairs. These enhancements are a result of a recent contract where cracking in the modified concrete overlay is attributed to the current curing requirements.

Section 6-09.3(14) Checking for Bond

This section is revised to provide harmony with the amendment to Section 6-09.3(6) Further Deck Preparation. Often times we disagree with the contractors whether locations they identify for further deck prep really need further work. The contractors position is that if they are overruled by the Agency for further deck repair regions they identify, then they can not be held responsible for deck delamination repairs after the overlay is completed.

Sections 6-09.4 Measurement

Revised to clarify how further deck preparation is to be measured when the bid item is measured by volume. The revised measurement is of the volume of material removed from deck repair areas, and is consistent with how Eastern Region personnel have been operating in the field.

Section 6-09.5 Payment

This revision clarifies that the price per cubic foot of Modified Concrete Overlay includes the material placed in small deck repair areas.

Section 6-10.2 Materials

Based on successful use of structural anchor bolts meeting ASTM F 1554 for overhead sign structures and bridge bearing assemblies, Section 9-06.5(4) is revised by switching exclusively from ASTM A 449 to ASTM F 1554. By revising the material specification in Section 9-06.5(4) from ASTM A 449 to ASTM F 1554, the statement in this section concerning embrittlement testing is no longer applicable and may be deleted.

Section 6-11 Reinforced Concrete Walls

Revises the entire section to incorporate existing General Special Provisions into the Standard Specs. This Amendment to the 2004 Standard Specs was omitted from the printing of the 2006 book. It was also not included in the hard copy distribution of the Amendment package from the plans office, but was added electronically since that distribution was made.

Section 6-11.3(3) Precast Concrete Wall Stem Panels

Summary of Changes From 2006 to 2008 Standard Specifications

The construction tolerances for the precast concrete wall stem panels are revised to correct a publishing error in the previous Amendment.

Section 6-12.3(6) Noise Barrier Walls

Revised to allow erection of precast concrete panels after the concrete reaches 85% of its full design strength. This is similar to what is allowed for luminaire poles and traffic signal poles.

Section 6-12.3(6) Precast Concrete Panel Fabrication and Erection

Effective August 5, 2006, the material for the bolts connecting the precast concrete noise barrier wall panels to their foundations was changed to ASTM F 1554. Since the specifications in Section 6-03 do not specifically cover the bolt tightening requirements for this bolt type, there is some confusion on this issue. Based on review the Bridge and Structures Office, the bolts in this connection application should be tightened to "snug tight" as defined in Section 6-03.3(32).

Section 6-13.2 Materials

The reference to Section 9-03.12(2) for gravel backfill is deleted. This reference is incorrect and inappropriate for structural earth walls. The current GSP for each of the three types of structural earth wall already specify the requirements for gravel borrow required for structural earth wall backfill. No other standard specification is necessary.

Section 6-13.3(2) Submittals

Section 6-13.3(2) required that all computer program output used in the design of a structural earth wall be accompanied by supporting hand calculations to verify the calculation process. Based on WSDOT's familiarity with the MSEW 3.0 computer program, the Construction Office has been waiving this requirements for walls designed under this particular computer program. This section is revised to incorporate that waiver into the specification.

Section 6-13.3(2) Submittals

The Materials Laboratory Geotechnical Services Branch has been reviewing their design recommendations process for structural earth walls. As a result of this review, standardized text has been authored for use in geotechnical reports and Plan details for the purpose of specifying minimum lengths for structural earth wall soil reinforcement. This provision is revised to make the Standard Specifications consistent with these changes to the geotechnical report verbiage and Plan detail notes.

Section 6-13.3(6) Welded Wire Faced Structural Earth Wall Erection

This revision references existing geosynthetic reinforcing construction requirements. This change is necessary to add Tensar welded wire faced structural earth wall system to the list of WSDOT pre-approved structural earth wall systems for wall heights of 33 feet or less.

Section 6-13.3(7) Backfill

Modified to prevent the use of "jumping jack" style compaction equipment in order to avoid potential damage to the straps.

Section 6-13.3(9) SEW Traffic Barrier and SEW Pedestrian Barrier

This revision clarifies WSDOT design policy assigning SEW traffic barrier and SEW pedestrian barrier design responsibility to the Contractor and the SE wall manufacturer. This was required under the previous specification, but not very clearly.

Section 6-14.3(2) Submittals

The submittal requirements are revised to include details of how the backfill is to be retained during each stage of construction.

Section 6-14.3(4) Erection and Backfill

Summary of Changes From 2006 to 2008 Standard Specifications

Revised to correct an incorrect reference to the method of compaction, and modified to prevent the use of "jumping jack" style compaction equipment in order to avoid potential damage to the straps.

Section 6-14.4 Measurement

The change to "Measurement" clarifies that the corner wrap area is not included in the area measured for payment, but the fascia panel includes the footing. This revision is a result of recent problems experienced during construction.

Section 6-14.5 Payment

The bid item name was changed to match the reference to the aggregate specification. Geosynthetic walls seem to need a unique form of Gravel Borrow, so we considered that the bid item name could reflect the specific aggregate type.

Section 6-14.5 Payment

This change corrects an error in the bid item name for Gravel Borrow for Geosynthetic Retaining Wall Including Haul.

Section 6-15.3(8) Soil Nail Testing and Acceptance

Construction experience with the pressure gauge gradation currently required for soil nails and permanent ground anchors is not sensitive or fine enough for properly tracking loads of lower magnitude. To correct this deficiency, a second gauge reading increment requirement is being added to ensure proper sensitivity at these lower anchor loads.

Section 6-16.3(5) Backfilling Shaft

The ADSC/WSDOT Shaft Team and WSDOT have developed revisions that call for placement of CDF in dry excavation, call for placement of pumpable lean concrete in wet excavation, and define what is meant by wet excavation.

Section 6-16.3(6) Installing Timber lagging and Permanent Ground Anchors

This section is changed to require that CDF or pumpable lean concrete be completely set prior to beginning excavation and placing lagging.

Section 6-17.3(7) Installing Permanent Ground Anchors

The revision to this section are made to ensure that the permanent ground anchor tendons are centered within the bearing plate and trumpet at the anchorage upon application of the alignment load. This is to prevent the reoccurrence of a situation in a recent project where the permanent ground anchors were installed eccentric to the geometry of the anchorage.

Section 6-17.3(8) Testing and Stressing

Construction experience with the pressure gauge gradation currently required for soil nails and permanent ground anchors is not sensitive or fine enough for properly tracking loads of lower magnitude. To correct this deficiency, a second gauge reading increment requirement is being added to ensure proper sensitivity at these lower anchor loads.

Section 6-18.3(3) Testing

This revision reduces the size of the shotcrete test panels for pre-production evaluation of shotcrete quality and strength, and for daily production testing. The reduction from 36" x 36" to a test panel that is 12" x 12" still provides a panel is adequate for WSDOT quality assurance purposes.

Section 6-18.3(7) Shotcrete Application

Summary of Changes From 2006 to 2008 Standard Specifications

This revision changes the curing requirements of the finished shotcrete facing. Two coats of curing compound will now be required for both temporary and permanent shotcrete facing, without the need for removal of the curing compound from the shotcrete surface after curing. When the shotcrete facing is the finished surface, the specifications now engage the requirements of Section 6-02.3(11) for additional curing requirements.

DIVISION 7 – DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER MAINS, AND CONDUITS

Section 7-01.3 Construction Requirements

This section was subdivided to enhance clarity. Bell and spigot joints have been included, and changes were made to update the specifications for new standards, AASHTO M 306 among others.

Section 7-02.2 Materials

Revised to remove unnecessary language that allows alternate installations shown in the plans to be used. It is inherently obvious that the Contractor may perform the work shown in the plans at no additional cost to the State.

Section 7-04.2 Materials

Revised to remove unnecessary language that allows alternate installations shown in the plans to be used. It is inherently obvious that the Contractor may perform the work shown in the plans at no additional cost to the State.

DIVISION 8 – MISCELLANEOUS CONSTRUCTION

Section 8-01.3(1) General

This change incorporates the existing GSP 010313.GR8 for areas of Eastern WA that receive more than 12 inches of rainfall into the Standard Spec. These requirements address NPDES permit conditions. GSP 010313.GR8 will be deleted.

Section 8-01.3(1)B Erosion and Sediment Control (ESC) Lead

The section is revised as a result of recent changes to NPDES permit conditions. The Department of Ecology no longer recognizes the WSDOT certification course, so we have revised acceptable training as that approved by Ecology. The information required to be submitted by the contractors ESC Lead is removed from the specification and is now included on a cool new standard form that is referenced in the spec.

Section 8-01.3(2)E Tacking Agent and Soil Binders

PAM is required at a higher rate, and is now allowed to be applied dry.

Section 8-01.3(2)F Dates for Application of Final Seed, Fertilizer and Mulch

Deleted the second paragraph, thereby accepting the risk of grass establishment if seeded within the specified seeding window. The deleted statement placed an inordinate amount of risk on the Contractor for grass establishment.

Section 8-01.3(9)A Silt Fence

Silt fence post requirements are liberalized to accept any steel post with a unit weight that meets the spec.

Section 8-01.3(9)A Silt Fence

Summary of Changes From 2006 to 2008 Standard Specifications

The change reinstates the strength requirements for silt fence backing materials. These requirements used to be a part of these specifications, but were lost during publication of the 2002 Standard Specifications. Additionally, the requirements for silt fence geotextile are clarified and an erroneous section reference to Maintenance of BMP's is corrected.

Section 8-01.4 Measurement

This section is supplemented with a measurement statement for Coir Log. Coir logs were added to this section in the printing of the 2006 book, but lacked the measurement and payment statements.

Section 8-01.4 Measurement

Soil Binder or Tacking Agent has been added. This was removed during publication by of the 2006 specifications, but should not have been.

Section 8-01.5 Payment

Items were added for "Seeding and Mulching" and "Soil Binder or Tacking Agent." These items were incorrectly removed during publication of the 2006 specifications.

Section 8-01.5 Payment

This section is supplemented with the bid item, "Coir Log." Coir logs were added to this section in the printing of the 2006 book, but lacked the measurement and payment statements.

Section 8-01.5 Payment

Mowing was included in Section 8-02 of the 2004 Standard Specifications, and was moved from Section 8-02 to Section 8-01 during printing of the 2006 Spec book. The construction Requirements successfully found their way to Section 8-01.3(2)I - but the bid item in the Payment section was lost during the move. This amendment corrects that error. Note: only the Payment statement is revised because Measurement for Mowing is already addressed in Section 8-01.4.

Section 8-02.3(8) Planting

The changes refined the language prohibiting burlap and foreign matter from being planted with the tree, clarifies the depth of planting. These revisions are a product of the WSDOT statewide specification team of Landscape Architects and roadside development professionals, and are in line with current industry practice.

Section 8-02.3(9) Pruning, Staking, Guying and Wrapping

This change modifies the requirements for pruning at the time of planting, and prohibits additional pruning until plants have been in the ground at least one year. These revisions are a product of the WSDOT statewide specification team of Landscape Architects and roadside development professionals, and are in line with current industry practice.

Section 8-02.3(12) Completion of Initial Planting

The evaluation of plant health at May 31 is deleted from the requirements for determining Completion of Initial Planting. The existing requirement that plants be "healthy and growing on May 31st in order to establish Completion of Initial Planting had the inadvertent affect of prolonging the first year plant establishment period. This shifted an inappropriate amount of risk to the Contractor by making them responsible for the plants for a longer period of time if planting is required to be performed early in the planting window (October 1 to March 1 for non-irrigated areas) in order to complete the contract in the specified number of working days.

Summary of Changes From 2006 to 2008 Standard Specifications

Section 8-02.3(13) Plant Establishment

the existing obligations during plant establishment were written as performance specs, but they do not work well for all applications. They are rewritten to allow the Engineer to direct the contractors operations (I know this is contrary to our normal practice, but appropriate in this specific kind of work).

Section 8-02.3(14) Plant Replacement

Revised to require that replacement plants shall be inspected prior to installation, and enhances the requirements for replacement plant quality.

Section 8-02.4 Measurement

Enhanced the measurement of many items to specify measurement along the slope, instead of measured as a horizontal distance.

Section 8-02.5 Payment

This revision enhances the payment statement for PSIPe to describe additional items that are included in the unit price. Also revises the payment schedule during the plant establishment period to provide earlier payment.

Section 8-04.3(2) Extruded Asphalt Concrete Curbs and Gutters

This amendment requires a tack coat application prior to placing asphalt curb. Prior editions of the standard specs required that tack be placed under the asphalt curb to adhere it to the existing surface. This requirement went missing in the 2004 book, but is not required by related provisions and is still needed.

Section 8-04.4 Measurement

Included the width of the sidewalk ramp in the measurement of cement concrete curb, and cement concrete curb and gutter that extends through a sidewalk ramp. This is shown in the standard plans but was not mentioned in the specifications.

Section 8-06 Cement Concrete Driveway Entrances

These changes move construction requirements out of the material requirements sections. This more clearly defines that all of section 6-02 applies to the concrete, not just the materials part.

Section 8-08 Rumble Strips

Sections 8-08.1 and 8-08.3 are revised to remove concrete from the list of items to receive rumble strips. The specification contradicts itself by describing rumble strips in concrete and then prohibiting rumble strips in concrete. The construction requirements are also revised to remove the disposal of cuttings and other debris "as designated by the Engineer," and now make such debris the property of the Contractor.

Section 8-09.3(5) Recessed Pavement Marker

The appropriate construction requirements for surface preparation and epoxy applications from Raised Pavement Markers are now included for the recessed type, as they have never been included but always needed.

Section 8-11.3(1)A Erection of Posts

This section is revised to accommodate long posts for all types of guardrail, including the new Type 31 guardrail.

Section 8-11.3(1)C Erection of Rail

Summary of Changes From 2006 to 2008 Standard Specifications

This section is modified to require that field drilled holes in beam guardrail be painted with galvanizing repair paint.

Section 8-11.3(4) Removing Guardrail

This revision clarifies what is included in the removal of guardrail. The provision did not clearly describe exactly what is being paid for in each item for removal of guardrail and for removal of guardrail anchor. Also eliminates the subjective condition of backfill compacted "to the satisfaction of the Engineer."

Section 8-11.3(5) Raising Guardrail

This section is revised to reflect two different methods of raising rail. One method is by raising the posts and is to be used for raising terminals and anchors. The second method is by drilling new holes higher on the post and is for raising all other guardrail.

Section 8-11.4 Measurement

This section is revised to accommodate type 31 long posts, and to add replacement posts and block per each when raised guardrail requires replacement of these components.

Section 8-11.5 Payment

This section is revised to accommodate Type 31 long posts, to add replacement posts and blocks per each when guardrail requires replacement of these posts, and to include the cost of replacing missing hardware in the price of raising beam guardrail.

Section 8-14 Cement Concrete Sidewalks

The reference to concrete conforming to Section 6-02 is moved out of the Material Requirements and into the Construction Requirements. This more clearly defines that all of section 6-02 applies to the concrete, not just the materials part.

Section 8-14.5 Payment

This change is made in order to include the excavation for sidewalk ramps with the unit price of the ramps, for cases when no roadway excavation is included in the contract. This was always intended to be the case, but was an oversight in previous editions of the Specification.

Section 8-16 Concrete Slope Protection

Changes the requirements for cast in place concrete from Concrete Class 3000 to Commercial Concrete.

Section 8-20.3(2) Excavating and Backfilling

Clarifies that foundations shall be backfilled according to the requirements of section 2-09.3(1)E. This is due to problems we have experienced with inadequate backfilling of foundations, and formwork that is left in place that compromises the stability of the foundation.

Section 8-20.3(4) Foundations

Clarifies that foundations shall be backfilled according to the requirements of section 2-09.3(1)E, and to require that all forming material be removed. This is due to problems we have experienced with inadequate backfilling of foundations, and formwork that is left in place that compromises the stability of the foundation.

Section 8-20.3(9) Bonding, Grounding

We commonly ground conductors to metal conduits, which can eventually degrade and no longer provide effective grounding. This provision requires additional grounding in many applications.

Section 8-20.3(9) Bonding, Grounding

This amendment does not alter the meaning of any requirements, but provides a more logical arrangement of some of the text for improved readability.

Summary of Changes From 2006 to 2008 Standard Specifications

Section 8-20.3(14)E Signal Standards

This amendment changes the minimum compressive strength required to erect the signal pole. The amount specified is incorrect and too low. It appears to have been made with an assumption of a higher class of concrete than what is really used.

Section 8-21.3(9)F Bases

Clarifies that foundations shall backfilled according to the requirements of section 2-09.3(1)E, and to require that all forming material be removed. This is due to problems we have experienced with inadequate backfilling of foundations, and formwork that is left in place that compromises the stability of the foundation.

Section 8-22 Pavement Marking

The changes clarify different methods of marking application by defining terms like flat lines and inset lines, and add application thicknesses for different kinds of marking materials. Inset line requirements are further clarified, and glass beading requirements were consolidated and enhanced with additional requirement for bead application.

Section 8-22 Pavement Marking

This section is revised in a number of ways. The most significant change in this section is the deletion of the marking names. WSDOT Standard Plans now describe all of these items of work. This is a significant improvement because the work was described in the WSDOT Design Manual and Standard Specs, and they were a maintenance problem for numerous manual owners every time they were revised, which was often. There are some marking name changes to align with MUTCD in the measurement and payment sections. We also had to add some general descriptions to define terms used in the tables and text. Grooved marking replacing Inset marking. The measurement and payment methods for the wide lines were changed to read the same as the 4 inch lines. We were able to reduce the bid items from 14 to 7 with this change.

Section 8-22.3(2) Preparation of Roadway Surfaces

This revision allows installation temperatures recommended by the manufacturer for plastic pavement marking materials.

Section 8-22.3(3) Marking Application

This change revises the direction of striping application for broken lines to align with the WSDOT striping crew's direction of travel. The change was requested by the WSDOT Maintenance striping crews because they have trouble matching the paint application when the contractors' initial application is funny. The specification is enhanced with the addition of cure period between coats of spray application plastic. Minor changed to inset plastic line thickness to eliminate the overfill specification. Overfilling the plastic line causes rapid loss of the retroreflective glass beads and reduces stripe life.

Section 8-22.3(3) Marking Application

Adds requirements for glass bead application that were eliminated due to a publishing error.

Section 8-22.3(5) Plastic Installation Instructions

The Section title is revised to include "Plastic" and the provision is enhanced to allow the Contractor to be certified by the manufacturer, instead of requiring a manufacturer's representative to be present during initial installation of plastic material.

Section 8-22.4 Measurement

Adds measurement of multiple items that were eliminated due to a publishing error.

Section 8-22.4 Measurement

Summary of Changes From 2006 to 2008 Standard Specifications

The reference to “Inlaid Plastic Line” is deleted. This is an emerging specification that is still under development, and these requirements were premature.

Section 8-22.5 Payment

Deletes the items for painted and plastic HOV Lane symbols Type _____. This revision was missed during publication. We still measure and pay for HOV symbols, but they are all the same type.

Section 8-22.5 Payment

The reference to “Inlaid Plastic Line” is deleted. This is an emerging specification that is still under development, and these requirements were premature.

DIVISION 9 - MATERIALS

Section 9-00.8 Sand Equivalent

Revised the sedimentation period because the specified time period conflicted with the Test Method.

Section 9-01.2(1) Portland Cement

The changes are required due to a request from a cement manufacturer, Lafarge. The request was due to the fact that Lafarge’s cement plant is a wet process and the cement kiln dust cannot be added back into the kiln without the specifications allowing this addition. If Lafarge’s cement plant was a dry process (newer and more energy efficient such as Glaciers plant in Seattle) the kiln dust is added back into the kiln as part of the cement making process and doesn’t require this change in specification.

Section 9-01.2(4) Cement Blended Hydraulic

The changes are required due to a request from a cement manufacturer, Lafarge. The request was due to the fact that Lafarge’s cement plant is a wet process and the cement kiln dust cannot be added back into the kiln without the specifications allowing this addition. If Lafarge’s cement plant was a dry process (newer and more energy efficient such as Glaciers plant in Seattle) the kiln dust is added back into the kiln as part of the cement making process and doesn’t require this change in specification.

Section 9-01.3 Tests and Acceptance

The change incorporates the requirements of WSDOT Standard Practice QC 1, Standard Practice for Cement Producers That Certify Portland Cement, into the contract.

Section 9-02.1(2) Medium Curing (MC) Liquid Asphalt

Cutback asphalts (MC and RC) are deleted from the WSDOT Standard Specifications because we do not use them any longer.

Section 9-02.1(3) Rapid Curing (RC) Liquid Asphalt

Cutback asphalts (MC and RC) are deleted from the WSDOT Standard Specifications because we do not use them any longer.

Section 9-02.1(4) Asphalt Binders

Revised to rename the section and to clarify the testing requirements that apply to Performance Graded Asphalt Binders.

Summary of Changes From 2006 to 2008 Standard Specifications

Section 9-02.1(4)A Performance Graded Asphalt Binder

Adds the requirement that asphalt suppliers submit a Quality Control Plan to the State Materials Lab. This has been industry practice for some time but is only now formalized in the contract.

Section 9-02.1(6)A Polymerized Cationic Emulsified Asphalt CRS-2P

Added to note 3 that the material for this test shall come from residue derived from another test method. This is in response to questions about the origin of the test material.

Section 9-02.1(9) Coal Tar Pitch Emulsion, Cationic Asphalt Emulsion Blend Sealer

This section is revised to require coal tar blends rather than 100 percent coal tar emulsion. Coal tar blends consist of 80 percent asphalt emulsion and 20 percent coal tar.

Section 9-03.1(1) General Requirements

The changes are required to implement the new ASTM test for Alkali Silica Reactivity mitigation. In addition, this section is modified to add requirements limiting the Degradation Factor, and to apply LA Wear requirements to all concrete aggregate instead of just the coarse aggregate.

Section 9-03.1(4)A Deleterious Substances

The change corrects an error in the test method name.

Section 9-03.1(4)B Wear in Los Angeles Machine

Because LA Wear requirements are now applied to all concrete aggregates, this section pertaining to coarse aggregates is being deleted.

Section 9-03.1(4)C Grading

This change adds AASHTO Grading No. 4 to this Section. This is needed for concrete paving mixes where the producers mix No. 4 and No. 67 instead of having a single pile of No. 467.

Section 9-03.4(2) Grading and Quality

This section is revised to accompany the rewrite of section 5-02 Bituminous Surface Treatments. The gradation for Crushed Cover Stone is deleted, and a new gradation is added for 3/8" to US No. 4 sieve.

Section 9-03.4(2) Grading and Quality

The change corrects an error in the test method name.

Section 9-03.8(2) HMA Test Requirements

The change corrects an error in the test method name and clarifies that the number of fractured faces is a minimum value.

Section 9-03.9(3) Crushed Surfacing

The change corrects an error in the test method name.

Section 9-03.11 Streambed Aggregates

The new material spec for Streambed Aggregates are needed in order to provide a material that is satisfactory for all stakeholders and addresses issues related to fish habitat, streambed stability and function. The existing GSP for Streambed Gravel did not satisfy every need, and so it is deleted.

Section 9-03.20 Test Methods for Aggregates

The change corrects an error in the test method name.

Section 9-05.1(1) Concrete Drain Pipe

This change deletes the metric reference to ASTM C 118.

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Section 9-05.1(6) Corrugated Polyethylene Drain Pipe (up to 10-inch)

This section is revised to remove redundant language, to clarify the pipe size, and to meet new AASHTO standards

Section 9-05.1(7) Corrugated Polyethylene Drain Pipe (12-inch through 60-inch)

This section is revised to clarify the pipe size, and to meet new AASHTO standards

Section 9-05.2(3) Perforated Bituminized Fiber Underdrain Pipe

This section is being deleted from the Standard Specifications because of feedback from the APWA subcommittee on drainage that this type of pipe has not been used in years.

Section 9-05.2(7) Perforated Corrugated Polyethylene Underdrain Pipe (Up to 10-inch)

This section is revised to remove redundant language and to clarify the pipe size.

Section 9-05.2(8) Perforated Corrugated Polyethylene Underdrain Pipe (12-inch through 60-inch)

This section is revised to increase the maximum size pipe pertaining to these requirements.

Section 9-05.3(1)A End Design and Joints

This revision corrects a typographical error. The word "plans" in the last sentence is revised to "plane".

Section 9-05.4(3) Protective Treatment

HQ Hydraulics found a discrepancy where the specifications referenced the wrong section. This amendment revises the references from 9-05.4(6) for Treatment 1 and Treatment 2 to 9-05.4(5).

Section 9-05.12(1) Solid Wall PVC Culvert Pipe, Solid Wall PVC Storm Sewer Pipe, and Solid Wall PVC Sanitary Sewer Pipe

The change updates terminology used in ASTM F 679 and updates the diameters of pipes allowed in the Std Spec to match the current ASTM F 679 specification.

Section 9-05.12(2) Profile Wall PVC Culvert Pipe, Profile Wall PVC Storm Sewer Pipe, and Profile Wall PVC Sanitary Sewer Pipe

The change to Std Spec 9-05.12(2) is to delete of AASHTO M 304 which is a metric specification and to add ASTM F 1803, which is the current specification for Poly (Vinyl Chloride)(PVC) Closed Profile Gravity Pipe and Fittings Based on Controlled Inside Diameter.

Section 9-05.15 Metal Castings

This section is revised to meet updated AASHTO Standards, to clarify the obligations of the producing foundry, and to allow leveling pads. There is disagreement among producers on the interpretation of as cast bearing surfaces, and this change clarifies the issue.

Section 9-05.19 Corrugated Polyethylene Culvert Pipe

This section is revised to require silt-tight joints.

Section 9-05.19 Corrugated Polyethylene Culvert Pipe

The change corrects an error in referring to the Certificate of Compliance as a "producers" certificate instead of a "manufacturers" certificate.

Section 9-05.20 Corrugated Polyethylene Storm Sewer Pipe

The change corrects an error in referring to the Certificate of Compliance as a "producers" certificate instead of a "manufacturers" certificate.

Section 9-06.5(4) Anchor Bolts

ASTM first developed ASTM F 1554 as a true anchor bolt material specification in 1994, and as this material has gained acceptance and become more readily available in the marketplace, the Bridge Design Office has been working to transition WSDOT specification of structural anchor

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bolt material from ASTM A 449 to ASTM F 1554. ASTM F 1554 offers many advantages over ASTM A 449, including a range of yield strengths (36, 55, and 105 ksi), supplemental specifications covering impact testing, and an improved chemistry that does not pose embrittlement problems when galvanized. Based on successful use of ASTM F 1554 for overhead sign structures and bridge bearing assemblies, Section 9-06.5(4) is revised by switching exclusively from ASTM A 449 to ASTM F 1554. This revision helps to simplify the specification by eliminating the need for embrittlement testing.

Section 9-06.9 Gray Iron Castings

This section is revised to meet new AASHTO standards.

Section 9-07.2 Deformed Steel Bars

ASTM A 706 has been an acceptable alternative to AASHTO M 31 for several years and the availability of ASTM A 706 has improved to the point that it can be considered readily available. Further background supporting this decision is described in the design memorandum posted on-line in the Bridge and Structures Office webpage under Bridge Design Manual Design Memorandums. To be consistent with this design policy, the Bridge and Structures Office sponsored this revision to Section 9-07.2 requiring the use of steel reinforcing bar conforming to ASTM A 706 only for all cast-in-place concrete bridge reinforcement (including shafts and concrete piles) and for precast elements of bridge substructure.

Section 9-07.5 Dowel Bars (For Cement Concrete Pavement)

The change requires dowel bars to be coated with purple epoxy coating instead of the traditional green epoxy coating.

Section 9-08.2 Paint Formulas – General

The color of the paint C-11-99 is revised because Fed-Std-595b superseded 595a.

Section 9-09.2(3) Inspection

The spec was not clearly written and is revised to clarify timber material acceptance. Material for structures must bear a grading stamp and certification. Other material may be grade stamped or certified.

Section 9-09.3(1) General

This provision is changed because the American Wood Preservers Association has changed the location of their standards from Section C1, to Sections U1 and T1.

Section 9-10.2(2) Reinforcement

During publishing of the 2006 Spec book, part of this provision was omitted due to an editing error. The missing language from the 2004 Standard Specs is reinserted, requiring reinforcement to meet the requirements of Section 9-07.

Section 9-12.7 Precast Concrete Drywells

This spec change is a result of cooperation with Industry, and corresponds to changes in the Standard Plans to align better with what manufacturers are already producing. There is a bit of sloppiness in the block-outs when castings are poured, so we are relaxing our maximum opening size to allow for that. By changing our spec, more of what manufacturers already have produced should meet our specs.

Section 9-13.5(2) Poured Portland Cement Concrete Slope Protection

Changes the requirements for cast in place concrete from Concrete Class 3000 to Commercial Concrete.

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Section 9-14.2 Seed

Changed to specify the amount of Pure Live Seed instead of the percent purity and germination rate. The change will allow us to more easily accept seed when comparing specs to the label.

Section 9-14.4(1) Straw

Deletes the reference to straw “mulch” material, since straw may be used for applications other than mulch.

Section 9-14.4(3) Bark or Wood Chips

Prohibits sawdust from being used as mulch.

Section 9-14.4(4) Sawdust

Deletes sawdust as an acceptable mulch.

Section 9-14.4(5) Wattles

Enhanced with additional properties of acceptable wattles.

Section 9-14.5(6) Compost Sock

Deleted the requirement that the sock be burlap, any biodegradable material is acceptable if it meets the requirements of the section. Revised the specs for filler material from “compost type 2” to “coarse compost” because the compost spec has changed.

Section 9-14.4(7) Tackifier

Deletes the application rate for tackifier since the rate does not particularly matter as long as the material stays in place.

Section 9-14.4(7) Tackifier

The first sentence of this section was deleted by a previous Amendment, but is restored because a comparison to guar is a necessary standard for determination of tackiness.

Section 9-14.4(8) Compost

The gradation change is required because the gradation that is specified is not consistent with what compost manufacturers are producing according to the WSDOT/US Composting council test form. The other changes are minor enhancements to the provision suggested by the HQ Roadside and Site Development Manager.

Section 9-14.4(8) Compost

These changes reflect minor adjustments to the acceptable values for compost stability, inert materials and soluble salts. The optional testing by use of the Solvita Maturity test is clarified. The compost supplier's testing requirements are modified to remove the reference to "initial" application in recognition that compost may sit for a while after "initial" application, and needs to be retested.

Section 9-14.4(8) Compost

Revises the gradation of coarse compost to make it easier to manufacture. Reduces the soluble salt content to a value that is not detrimental to plant health. Allows testing of compost maturity by means of the Solvita Compost Maturity Test because this is a quick measurement of compost maturity and should remain as an available tool if needed. Changed the sampling requirement from 30 days prior to installation to 90 days prior to installation because 30 days was inadequate, and removed the requirement that compost be sampled from the material stockpiled for the project in recognition that some suppliers may not have adequate room to maintain one stockpile for all material supplied to a contract. Minor changes in grammar and sentence structure for improved clarity.

Section 9-14.4(8) Compost

Summary of Changes From 2006 to 2008 Standard Specifications

The gradation change is required because the gradation that is specified is not consistent with what compost manufacturers are producing according to the WSDOT/US Composting council test form. The other changes are minor enhancements to the provision suggested by the HQ Roadside and Site Development Manager.

Section 9-14.5(2) Erosion Control Blanket

This change is being proposed by the Statewide Erosion Control Coordinator. The change is needed because our specifications require the material to meet a referenced standard (ASTM D 4355) and then impose a higher standard (1000 hours exposure). The referenced standard is sufficient.

Section 9-14.5(7) Coir Log

Adds this new section to implement materials previously specified by Special Provision.

Section 9-14.6(1) Plant Materials Description

Revises and simplifies the definitions of planting materials.

Section 9-14.6(2) Quality

Adds requirement that plants be purchased from a nursery licensed to sell plants in the State of Washington.

Section 9-14.6(3) Handling and Shipping

Deletes the requirement that antidessicant material be applied before shipping.

Section 9-14.6(6) Substitution of Plants

Revised to reference published standards for determining equivalent sizes of root ball or container size for substituted plants.

Section 9-14.7(7) Temporary Storage

Minor change of grammar and sentence structure for improved clarity. Prohibits the use of cuttings that have rooted.

Section 9-15.1 Pipe, Tubing and Fittings

This section is modified to remove a contradictory reference. The provision specifies Type L copper pipe and refers to Section 9-30.6(3)A which specifies Type K pipe.

Section 9-16.1(1)A Chain Link Fence and Post Material

The spec is being enhanced to reference an existing ASTM standard for the structural properties of the material, instead of referencing a WSDOT Standard Plan. This will allow the referenced Standard Plan to be retired.

Section 9-22.1 Monument Cases, Covers, and Risers

This section is revised to meet new AASHTO standards.

Section 9-23.6 Admixture for Concrete

The change allows non chloride accelerators to be used for CDF.

Section 9-28.14(1) Timber Sign Posts

The use of ACQ has resulted in degradation of aluminum coming into contact with the treated wood, and we attempted to prohibit its use by removing all references to it from our specs. This resulted in the retention value for wood posts being unspecified, but it did not fully prohibit use of ACQ because the AWP standards for treatment still allow it. The change to section 9-28 should fix the problem, as it will now state that the preservative and retention must adhere to section 9-09.3(1).

Section 9-28.14(3) Aluminum Structures

Requirements for welding of aluminum and steel sign structures and light and signal standards have long been referenced to specific sections in the latest AASHTO Standard Specifications for

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Structural Supports for Highway Signs, Luminaires and Traffic Signals. This reference has been difficult to keep current due to AASHTO moving the location of the referenced section with each new edition. This reference has also been a rather circuitous method of specifying the code since all the AASHTO code does is make reference to the applicable AWS Welding Code. To simplify the welding code reference, the aluminum reference is now made directly to ANSI/AWS D1.2, latest edition, Structural Welding Code - the code for aluminum.

Section 9-29.2 Junction Boxes

This entire section is revised to enhance clarity. The spec now includes standard-duty and heavy-duty junction boxes, complete with testing provisions. Heavy-duty junction boxes are for use in areas that may see traffic loading. Also improves the j-box lid and coating requirements. These changes are a result of ever increasing occurrences of standard duty j-boxes ending up in traffic areas, and of lid failures.

Section 9-29.2 Junction Boxes, Cable Vaults and Pull Boxes

The existing provisions are revised to describe new classifications for standard duty and heavy duty j-boxes, and to provide testing requirements for the new classifications. The requirement that non-concrete junction box testing must be verified by a representative of the Contracting Agency has been modified to allow acceptance by certification. The specs are then supplemented with new requirements for cable vaults and pull boxes.

Section 9-29.6 Light and Signal Standards

Section 9-29.6 is revised to define what is covered by the terms "light standards" and "signal standards". In recent years, "signal standards", as shown in the Standard Plans and defined in the GSP's for pre-approved fabrication plans, have been expanded to include many different types of poles beyond the conventional pole and mast arm arrangement. This expansion beyond the conventional understanding has led to some confusion in application of standard specification requirements for fabrication of these poles.

Section 9-29.6(2) Slip Base Hardware

Revised to specify flatness tolerances for plate washers in response to concerns that plate washers that are not flat may impede the function of the slip-base hardware.

Section 9-29.6(4) Welding

Requirements for welding of aluminum and steel sign structures and light and signal standards have long been referenced to specific sections in the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. This reference has been difficult to keep current due to AASHTO moving the location of the referenced section with each new edition. This reference has also been a rather circuitous method of specifying the code since all the AASHTO code does is make reference to the applicable AWS Welding Code. To simplify the welding code reference, the steel reference is now made directly to AWS D1.1/D1.1M, latest edition, Structural Welding Code - the code for steel.

Section 9-29.6(5) Foundation Hardware

This Section is the only other Section where ASTM A 449 is mentioned. By revising Section 9-06.5(4) to specify ASTM F 1554 material, Section 9-29.6(5) can now reference the parent Section directly. Because some illumination and traffic signal standard fabricators specify both ASTM A 449 and ASTM F 1554 as acceptable anchor bolt materials in their current pre-approved fabrication drawings, a reference to ASTM A 449 as an acceptable alternative material is retained, along with a requirement for embrittlement testing.

Section 9-30.6(3)A Copper Tubing

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This section referenced a Metric ASTM. It is revised to remove the metric designation.

Section 9-33 Construction Geosynthetic

This section is revised to correct improper terminology, but goes on to change the following: it now clearly identify approval process for these geosynthetic materials as indicated in section 9-33.4(1); acceptance criteria is addressed per the recommendations of the Risk Assessment meeting as indicated in 9-33.4(3) and 9-33.4(4); tables are cleaned up and changes added; units of measure are corrected; and notes are consolidated.

Section 9-33.2(3) Prefabricated Drainage Mat

This is a minor revision to the material properties of prefabricated drainage mat. The grab strength is revised from 110 lbs to 100 lbs. Some Contractors under some recent contracts requiring prefabricated drainage mat material have had difficulty providing material conforming to the currently specified grab strength of 110 pounds minimum.

Section 9-34.2 Paint

Adds material requirements for the painted blue background of the “Access Parking Space Symbol with Background” standard item. This item was added by a previous Amendment but did not include the material requirements.

Section 9-34.3 Plastic

Adds material requirements for the plastic blue background of the “Access Parking Space Symbol with Background” standard item. This item was added by a previous Amendment but did not include the material requirements.

Section 9-34.4 Glass Beads

Minor update of an ASTM test number to eliminate an old year designation

Section 9-34.4 Glass Beads

This revision reformats the existing text for clarity. It also limits the amount of heavy metal elements that may be found in some glass beads, and adds the testing requirements for the silane coating.

Section 9-35 Temporary Traffic Control Materials

This section has been revised to bring these requirements up to current standards, and enhanced with new requirements for tall channelizing devices and portable signals.

Section 9-35.2 Construction Signs

This revision to the material requirements for construction signs requires all signs to be made from aluminum. This does not preclude the use of fabric roll-up signs that meet NCHRP 350 until December 31, 2007. We attempted to prohibit the use of plywood signs back in August 2004 when we deleted the material requirements for plywood signs from Section 9-28.10, but it did not result in the desired intent. This provision now accomplishes that intent.